1988

Proof of Physical Child Abuse

John E.B. Myers
Pacific McGeorge School of Law

Linda Carter
Pacific McGeorge School of Law

MISSOURI
LAW REVIEW

VOLUME 53 SPRING 1988 NUMBER 2

PROOF OF PHYSICAL CHILD ABUSE

By John E.B. Myers* and Linda E. Carter**

Child abuse is maddeningly difficult to prove. Maltreatment occurs in secret, and the child is usually the only eyewitness. Many children are too young or too frightened to testify.[1] Tragically, some victims do not live to tell their story.[2] Often, the only evidence is the bruised and battered body of a little child.[3] The purpose of this Article is to shed light on some of the difficult evidentiary questions plaguing physical abuse litigation.

Section I describes evidence intended to prove that a child's injuries are

* Associate Professor of Law, University of the Pacific, McGeorge School of Law.
** Associate Professor of Law, University of the Pacific, McGeorge School of Law.

The authors wish to express their appreciation to Ms. Petra Wright for her valuable assistance in preparing the manuscript for this article.

1. A substantial percentage of child abuse victims are very young. In a California study, 37% of reported cases of child abuse involved children five years of age or younger. The percentage of victims between birth and age two was 19.4%. OFFICE OF THE ATTORNEY GENERAL, COMMISSION ON THE ENFORCEMENT OF CHILD ABUSE LAWS 1-2 (1985). In a study prepared by the American Humane Association, 43% of abused and neglected children were between birth and five years of age. AMERICAN HUMANE ASSOCIATION, HIGHLIGHTS OF OFFICIAL CHILD NEGLECT AND ABUSE REPORTING 1985, 15 (1987).

2. According to official reports, 1,200 children died as a result of abuse in 1986. *See* Kantrowitz, *How to Protect Abused Children*, NEWSWEEK, Nov. 23, 1987, at 70; *see also infra* text accompanying note 174. A sad percentage of children who die from maltreatment are very young. The American Humane Association reports that "[c]hildren who are reported as fatalities are much younger compared to all involved children — their average age is 2.0 versus 7.1 years." AMERICAN HUMANE ASSOCIATION, *supra* note 1, at 20.

3. In a child homicide case, the Utah Supreme Court spoke of the difficulty encountered in proving abuse. Justice Durham, writing for the court, stated that "[t]he key evidence in this case is the mute testimony of the body of three-year-old Tawnya Tanner." State v. Tanner, 675 P.2d 539, 541 (Utah 1983).

nonaccidental. The Section begins with discussion of the battered child syndrome. This is followed by an analysis of the types of injuries that are indicative of abuse. Attention then turns to admissibility of photographs of a child's injuries. From there, the discussion focuses on the foundation, permissible bases and limits of expert testimony on the battered child syndrome. Section I concludes with discussion of uncharged misconduct evidence to prove non-accidental injury. Section II is devoted to methods of establishing the identity of the perpetrator.

I. EVIDENCE WHICH ESTABLISHES THAT A CHILD'S INJURIES WERE NONACCIDENTAL

Statutory definitions of physical abuse vary slightly from state to state. In the main, however, abuse is defined as nonaccidental physical injury. In proving physical abuse the state encounters two primary evidentiary difficulties. First, it must prove that a child's injuries were nonaccidental, and second, it must identify the perpetrator. On the first issue, discussion of the battered child syndrome is an appropriate beginning. Expert testimony describing the syndrome plays a key role in abuse litigation.

A. Battered Child Syndrome

Dr. Henry Kempe and his colleagues coined the term "battered child syndrome" in their seminal 1962 article describing the syndrome. Dr. Kempe describes the battered child as follows:

> The battered child syndrome may occur at any age, but, in general the affected children are younger than 3 years. In some instances the clinical manifestations are limited to those resulting from a single episode of trauma, but more often the child's general health is below par, and he shows evidence of neglect including poor skin hygiene, multiple soft tissue injuries, and malnutrition. One often obtains a history of previous episodes suggestive of parental neglect or trauma. A marked discrepancy between clinical findings and historical data as supplied by the parents is a major diagnostic feature of the battered-child syndrome. . . . Subdural hematoma, with or without fracture of the skull . . . is an extremely frequent finding even in the absence of fractures of the long bones. . . . The characteristic distribution of these multiple fractures and the observation that the lesions are in different stages of healing are of additional value in making the diagnosis.[4]

---

4. Kempe, Silverman, Steele, Droegmuller & Silver, *The Battered-Child Syndrome*, 181 J. A.M.A. 17 (1962). It is important to note that not all abused children demonstrate symptoms of battered child syndrome. As Kempe states in his classic description of the battered child, sometimes injury is the result of "a single episode of trauma." *Id.* In fatal child abuse in particular, many victims do not demonstrate the requirements of the battered child syndrome. See Zumwalt & Hirsch, *Pathology of Fatal Child Abuse and Neglect*, in THE BATTERED CHILD 247 (R. Helfer & R. Kempe 4th ed. 1987), where the authors write that "in our experience approximately 15-20 percent of child abuse fatalities fulfill [the] criteria for the battered baby syndrome

Courts agree that battered child syndrome is an accepted medical diagnosis which is recognized with approval by medical science.[5] Expert testimony on the syndrome is routinely approved.[6] In fact, every appellate court which has considered such evidence has approved it.[7] Judges are comfortable with the syndrome because it is based on signs and symptoms that are verifiable by physical examination, x-ray, and other objective medical techniques. The primary function of expert testimony on the syndrome is to establish that a child's injuries were not accidental.[8] As the Pennsylvania Superior Court remarked,"[t]he battered child syndrome simply indicates that a child . . . has not suffered . . . injuries by accidental means."[9]

In addition to stating that injuries were nonaccidental, an expert may render an opinion on the means used to inflict injuries.[10] In *People v. Jack-*

. . . . [F]atalities from an isolated or single beating are as common as fatalities from repeated physical assault (battered baby syndrome)." *Id.* at 251-58.

5. State v. Moyer, 151 Ariz. 253, ____, 727 P.2d 31, 33 (Ct. App. 1986); State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 409 (1985) ("Battered child syndrome has become a well established medical diagnosis."); State v. Tanner, 765 P.2d 539, 543 (Utah 1983) ("We are satisfied that the concept of the battered child syndrome is grounded in scientific research and is widely accepted in the medical community."); *see also* State v. McClary, 207 Conn. 233, ____, 541 A.2d 96, 102 (1988) (shaken baby syndrome is generally accepted by medical science). For further discussion of the general acceptance of battered child syndrome by medical science, see *infra* subsection I. D-1 of text.

6. *See, e.g.*, United States v. Bowers, 660 F.2d 527, 529 (5th Cir. 1981) ("Proof that a child suffers from the battered child syndrome may show that the parent's explanation of the child's injuries is a fabrication."); Eslava v. State, 473 So. 2d 1143 (Ala. Crim. App. 1985) (murder prosecution); People v. Jackson, 18 Cal. App. 3d 504, 95 Cal. Rptr. 919 (1971); Bell v. Commonwealth, 684 S.W.2d 282 (Ky. Ct. App. 1984); State v. Durfee, 322 N.W.2d 778 (Minn. 1982); People v. Henson, 33 N.Y.2d 63, 304 N.E.2d 358, 349 N.Y.S.2d 657 (1973); State v. Wilkerson, 295 N.C. 559, 247 S.E.2d 905 (1978); Commonwealth v. Rodgers, 364 Pa. Super. 477, 528 A.2d 610 (1987); State v. Holland, 346 N.W.2d 302 (S.D. 1984); State v. Best, 89 S.D. 227, 232 N.W.2d 447 (1975); Huerta v. State, 635 S.W.2d 847 (Tex. Ct. App. 1982) (evidence of battered child syndrome properly admitted in murder case); State v. Tanner, 675 P.2d 539 (Utah 1983); State v. Mulder, 29 Wash. App. 513, 629 P.2d 462 (1981); Annotation, *Admisibility of Expert Medical Testimony on Battered Child Syndrome*, 98 A.L.R.3D 306 (1980).

7. *See* State v. Tanner, 675 P.2d 539, 543 (Utah 1983) ("Our research shows that all courts which have addressed the question have affirmed the admission of expert medical testimony regarding the presence of the battered child syndrome."). *But see* State v. Tanner, 675 P.2d 539, 551 (Utah 1983) (Stewart, J., dissenting).

8. *See* People v. Jackson, 18 Cal. App. 3d 504, 507, 95 Cal. Rptr. 919, 921 (1971) ("the 'battered child syndrome' simply indicates that a child found with the type of injuries outlined above has not suffered those injuries by accidental means"); State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 409 (1985).

9. Commonwealth v. Rodgers, 364 Pa. Super. 477, ____, 528 A.2d 610, 614 (1987).

10. People v. Jackson, 18 Cal. App. 3d 504, 507, 95 Cal. Rptr. 919, 921 (1971); State v. McClary, 207 Conn. 233, ____, 541 A.2d 96, 100 (1988); State v. Jurgens, 424 N.W.2d 546, 549 (Minn. Ct. App. 1988); State v. Tanner, 675 P.2d 539, 542

son,[11] the California Court of Appeal wrote that "[a]n expert medical witness may give his opinion as to the means used to inflict a particular injury, based on his deduction from the appearance of the injury itself"[12] For example, the expert could state that a skull fracture was probably caused by a blow from a blunt instrument such as a fist. The expert's description of the cause of injury may include an opinion that the injury was probably caused by "a person of mature strength."[13]

Courts generally permit experts to respond to questions which ask whether injuries could have happened in a particular way. For example, an expert should be permitted to respond to a question such as, "Could an injury of this type have been caused by throwing the child against a wall?" Additionally, the expert may be asked "whether the explanation given for the injuries is reasonable."[14]

In child abuse litigation, the state's evidence is often an amalgam of circumstantial proof. In *State v. Muniz*,[15] the court acknowledged this reality, and discussed the role of circumstantial evidence:

> The State was obligated to prove its case against defendants here, as in so many child-abuse cases, by means of circumstantial evidence. If circumstantial evidence is of sufficient quality to convince a jury beyond a reasonable doubt of defendant's guilt, it does not matter that it is circumstantial. . . . Circumstantial evidence is often more persuasive than direct evidence. . . . It has been recognized in numerous cases that criminal activities are ordinarily not recognizably performed in the open, proof of such activities can only be established by circumstantial evidence.[16]

It is clear from the *Muniz* case and from other decisions[17] that a criminal

---

(Utah 1983).

11. 18 Cal. App. 3d 504, 95 Cal. Rptr. 919 (1971).

12. *Id.* at 507, 95 Cal. Rptr. at 921 (citing Estate of Rowley, 257 Cal. App. 2d 324, 340, 65 Cal. Rptr. 139, 149, (1967)).

13. State v. Mulder, 29 Wash. App. 513, 515, 629 P.2d 462, 463 (1981). Testimony that an injury was probably inflicted by a person of adult strength is admissible to identify the perpetrator by reducing the class of persons who could be responsible for the injury. For further discussion of techniques used to identify the abuser, see *infra* section II of text.

14. State v. Tanner, 675 P.2d 539, 544 (Utah 1983).

15. 150 N.J. Super. 436, 375 A.2d 1234 (1977), *cert. denied*, 77 N.J. 473, ____, 391 A.2d 488 (1978).

16. 150 N.J. Super. at 441-42, 375 A.2d at 1236-37 (citations omitted).

17. *See* State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 410-11 (1985) ("Circumstantial evidence may be used . . . to establish the elements of the crimes charged."); Owen v. State, 514 N.E.2d 1257, 1258 (Ind. 1987) ("criminal conviction can be based solely on circumstantial evidence"); State v. Jurgens, 424 N.W.2d 546, 555 (Minn. Ct. App. 1988); State v. Ostlund, 416 N.W.2d 755 (Minn. Ct. App. 1987); State v. Muniz, 150 N.J. Super. 436, 441-42, 375 A.2d 1234, 1236-37 (1977); State v. Tanner, 675 P.2d 539, 550 (Utah 1983) ("We have frequently stated that circumstantial evidence alone may be competent to establish the guilt of the accused."); State v. Johnson, 135 Wis. 2d 453, 457, 400 N.W.2d 502, 504 (Ct. App. 1986) ("Appellate courts have recognized the necessity of extensive reliance on circumstantial evidence in

verdict or juvenile court adjudication of abuse can be predicated on circumstantial evidence. Of particular relevance to the present inquiry, a finding of nonaccidental injury can be premised partially or *entirely* on expert testimony on battered child syndrome.[18]

The trial court balances the evidentiary value of expert testimony on the syndrome against the potential that the evidence may be unfairly prejudicial to the defendant.[19] In order to reduce the possibility of prejudice, the court may limit the expert's use of the label "battered child syndrome."[20]

Finally, "battered child syndrome" is a *medical diagnosis* based on expert observation of a child's damaged body.[21] The diagnosis does not depend on evidence of defendant's conduct toward the child. Nor does it hinge on proof of defendant's character or propensity to abuse children. In other words, testimony on the battered child syndrome is *not* character evidence. Thus, testimony on the syndrome is not barred by the rule prohibiting evidence of a person's character to prove that the person acted in conformity therewith on a particular occasion.[22]

B. What Types of Injuries are Probably Nonaccidental

To evaluate the credibility and probative value of expert testimony on the battered child syndrome, it is helpful to understand the types of injuries that are probably nonaccidental.[23] This section describes those injuries. The discus-

---

prosecutions involving child victims." Defendants were charged with assault and injury or risk of injury to a child.).

18. *See* State v. Moyer, 151 Ariz. 253, ____, 727 P.2d 31, 33 (Ct. App. 1986); State v. McClary, 207 Conn. 233, ____, 541 A.2d 96, 101 (1988).

19. State v. Moyer, 151 Ariz. 253, ____, 727 P.2d 31, 33 (Ct. App. 1986) ("Once the court finds this evidence relevant, it must determine whether it is unduly prejudicial pursuant to Rule 403. . . ."); *see also* State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 409 (1985); State v. Tanner, 675 P.2d 539, 547 (Utah 1983).

20. State v. Mulder, 29 Wash. App. 513, 516-17, 629 P.2d 462, 463-64 (1981).

21. *See* State v. Tanner, 675 P.2d 539, 545 (Utah 1983).

22. *Id.*

23. For helpful discussion of nonaccidental injuries, see People v. Gordon, 738 P.2d 404 (Colo. Ct. App. 1987). In this criminal child neglect case arising out of the death of a nine-month old infant, the state offered expert testimony from Dr. Richard Krugman, Director of the University of Colorado Medical School's National Center for the Prevention and Treatment of Child Abuse and Neglect, a nationally respected expert in the field of child abuse. Dr. Krugman testified that:

> [E]ight diagnostic factors can be used to determine whether a child's injury is nonaccidental: a discrepant history of injury; delay in seeking medical attention; stress-producing family crisis; a triggering event by the child; a history of abuse by the adult abuser; physical or social isolation of the abuser; unrealistic expectations of the child by the abuser; and a pattern of increasing severity of injury.

Id. at 406. *See also* State v. Tanner, 675 P.2d 539, (Utah 1983). In *Tanner*, four physicians testified about the condition of the child. The court's summary of the testimony of one of the experts is instructive. The court wrote:

sion draws heavily from two leading treatises on child abuse: *The Battered Child*,[24] edited by Drs. Ray Helfer and Ruth Kempe, and *Child Abuse and Neglect: A Medical Reference*,[25] edited by Dr. Norman Ellerstein.

1. Diagnostic Value of Parents' Explanation of Injury

When a physician suspects that a child's injuries are nonaccidental, the doctor pays close attention to the parents' explanation of the injuries. Particular attention focuses on the following factors:

a. Unexplained Injury

When a child is examined by a doctor, some parents deny any knowledge that the child was hurt. Other parents acknowledge the injuries, but offer no explanation as to how they happened. In many cases, both situations are suspicious.[26]

b. Implausible Explanation Offered by Parents

One of the strongest indicators of nonaccidental injury is an explanation "which is implausible and inconsistent with common sense and medical judgment."[27] For example, parents may describe a minor accident to explain major injury. The parents may state that a child with a severe skull fracture and multiple body bruises fell from a couch onto a carpeted floor. Alternatively, parents may state that an injury happened when a child engaged in activity the child could not perform.[28] For example, the parents may state that a four-month-old baby was burned when she climbed onto a stove and turned on the burner.

> Dr. Palmer testified regarding the phenomena that alert a physician to the possibility of the battered child syndrome, such as: too many bruises and bruises in atypical locations considering the child's age; fractures, such as spiral fractures, of a type and severity not otherwise explained; severe head injuries not otherwise explained; and in general, a history of the trauma given by a caretaker that is inconsistent with the child's injuries. The doctor also testified that abusive disciplinary methods are frequently part of the battered child syndrome, that the parents of such children are typically very young or inexperienced and that they are likely to have a history of prior abusive conduct. Dr. Palmer went on to identify in Tawnya the characteristics of the battered child, emphasizing in particular the inadequate explanation given by the defendant for Tawnya's injuries.

Id. at 544.

24. THE BATTERED CHILD (R. Helfer & R. Kempe 4th ed. 1987).

25. CHILD ABUSE AND NEGLECT: A MEDICAL REFERENCE (N. Ellerstein ed. 1981).

26. *See* Schmitt, *The Child with Nonaccidental Trauma*, in THE BATTERED CHILD 178 (R. Helfer & R. Kempe 4th ed. 1987); *see also* People v. M.V., 742 P.2d 326, 327 (Colo. 1987).

27. Schmitt, *supra* note 26, at 179.

28. *Id.*

An implausible explanation is critically important for diagnostic purposes. In addition to its medical value, numerous courts hold that implausible explanations have another use in child abuse litigation. The trier of fact may consider implausible explanations as circumstantial evidence of abuse.[29] For example, in *Payne v. State*,[30] the court remarked that

> a jury may consider and give weight to any false and improbable statements made by an accused in explaining suspicious circumstances. . . . When we consider the defendant's improbable statement in this case together with the nature of the injuries to the child, the medical opinion evidence, and the defendant's opportunity, we are persuaded that, taken together, they are sufficient to constitute substantial evidence of guilt.[31]

c. Discrepant Explanations Offered by Parents

When abuse is suspected, parents should be questioned in separate locations. Since abusive parents seldom disclose the real cause of their child's injuries, they have to invent excuses. When parents are questioned separately, their excuses may be inconsistent. The inconsistency undercuts the validity of both explanations, and may point toward abuse.

d. Alleged Self-inflicted Injury in a Young Infant

Young babies cannot crawl, and they generally are unable to inflict serious injuries on themselves.[32] For example, a parent's statement that a month-old infant broke her arm by climbing onto a chair and falling off is untrue. Furthermore, children rarely hurt themselves on purpose.

---

29. *See* Payne v. State, 21 Ark. App. 243, 247, 731 S.W.2d 235, 236-37 (1987); People v. Gordon, 738 P.2d 404, 406 (Colo. Ct. App. 1987) (nationally respected expert in child abuse, Dr. Richard Krugman, testified that "a discrepant history is found in nearly all cases of child abuse, that is, the abuser will give an explanation of the child's injuries that does not comport with the medical diagnosis"); Cohoon v. United States, 387 A.2d 1098, 1100 (D.C. 1978); State v. Durfee, 322 N.W.2d 778, 783 (Minn. 1982); Schleret v. State, 311 N.W.2d 843, 845 (Minn. 1981) ("Crucial to identifying such cases are the discrepancies between the parent's version of what happened to the child when the injuries occurred and the testimony of medical experts as to what could not have happened, or must have happened, to produce the injuries."); People v. Henson, 33 N.Y.2d 63, 71-73, 304 N.E.2d 358, 362-63, 349 N.Y.S.2d 657, 663-64 (1973); Childs v. State, 744 P.2d 567, 568 (Okla. Crim. App. 1987); State v. Johnson, 135 Wis. 2d 453, 456-59, 400 N.W.2d 502, 504-06 (Ct. App. 1986); *see also* State v. Tanner, 675 P.2d 539, 544 (Utah 1983) ("[T]he expert should be able to testify in detail regarding the nature of the child's injuries and whether the explanation given for the injuries is reasonable.").

30. 21 Ark. App. 243, 731 S.W.2d 235 (1987).

31. *Id.* at 247, 731 S.W.2d at 236-37.

32. Schmitt, *supra* note 26, at 179.

e. Alleged Sibling-inflicted Injuries are Suspicious

Statements that a sibling caused serious injury should be regarded with suspicion.[33]

f. Delay in Seeking Medical Care

Delay in obtaining medical care may indicate nonaccidental injury.[34] The concerned parent with nothing to hide normally seeks immediate help for serious or life-threatening injury.

2. Bruises

Bruises are one of the most common types of nonaccidental injury. Every parent knows, of course, that *non*abused children get bruised. Thus, it is important to differentiate accidental from nonaccidental bruises. The most common site of accidental bruises is skin overlying bony prominences such as knees and shins. Bruises of the forehead are common in children who are just learning to walk. Bruises from falling are usually circular or oval shaped with nondescript borders.[35]

Nonaccidental bruises frequently occur at sites where accidental bruising is unlikely. For example, nonaccidental bruises are often found on the buttocks, lower back, abdomen, lateral thighs, and other soft-tissue areas.[36] Genital or inner-thigh bruises[37] are sometimes inflicted as punishment for toileting mishaps. In such cases, sexual abuse should also be suspected.[38]

The hand can cause various types of pressure bruises, including grab marks and squeeze marks. Such bruises are oval-shaped and resemble finger prints. In some cases an outline of the fingers is actually visible, such as when a child is slapped on the cheek.[39]

In large measure, a diagnosis of battered child syndrome is based on evidence that a child suffered a series of injuries over time. Such proof undercuts the probability of accident because a normal, healthy child is unlikely to suffer one suspicious accidental injury after another. As the California Court of Appeal observed in *People v. Jackson*,[40] "it would take thousands of children to

33. *Id.* at 179-80.

34. *See* People v. Gordon, 738 P.2d 404, 406 (Colo. Ct. App. 1987); *see also* Schmitt, *supra* note 26, at 180.

35. Schmitt, *supra* note 26, at 186-87.

36. *Id.* at 180-86.

37. *See* State v. Moyer, 151 Ariz. 253, ____, 727 P.2d 31, 32 (Ct. App. 1986) ("Bruising was found on the child's inner thighs, a place where bruising is usually not caused by accident.").

38. Schmitt, *supra* note 26, at 180.

39. *Id.* at 183.

40. 18 Cal. App. 3d 504, 95 Cal. Rptr. 919 (1971).

have the severity and number and degree of injuries that this child had over the span of time [involved] by accidental means."[41] One way to determine whether a child's injuries occurred over time is to ascertain whether the injuries are in various stages of healing. Evidence of injuries in various stages of healing is particularly telling when parents assert that all injuries occurred at one time.

Physicians are often asked to date bruises so as to determine whether they occurred at different times. Determining the approximate age of such injuries is possible because as bruises heal they progress through a predictable sequence of changes in shape and color. Precise dating is not possible, however, because while the sequence of healing is predictable, the rate of healing is not. Despite this imprecision in dating bruises, it is often possible to determine that bruises occurred at different times.

In general, if a bruise is swollen and tender, it is probably less than two days old. The initial color may be red, blue, or purple. As the bruise heals, it changes color. The changes begin at the edge of the bruise. At about five days, the bruise turns a greenish color. Within a few more days, the color changes to yellow, and eventually to brown. The brown color may persist for several weeks.[42]

3. Human Bite Marks

"Human bite marks leave distinctive, pared, crescent-shaped bruises that contain individual teeth marks."[43] It is possible for a physician or forensic dentist to differentiate a bite inflicted by a child from one caused by an adult. Additionally, a properly qualified dentist may offer expert testimony on the origin of bite marks.[44]

4. Strap, Lash, and Loop Marks

Straps leave rectangular bruises of various lengths. Lash marks are narrow and straight-edged. Loop marks are caused by blows from a doubled-over cord or similar instrument.[45] The nature of strap, lash, and cord bruises stand in stark contrast to accidental bruises, which usually overlie a bony prominence, and are circular and nondescript.

5. Inflicted Head Injuries

One of the most dangerous and deadly forms of abusive injury is subdural

---

41. *Id.* at 507, 95 Cal. Rptr. at 921.
42. For discussion on the of dating bruises, see Schmitt, *supra* note 26, at 192.
43. *Id.* at 183.
44. *See id.*; *see also* Annotation, *Admissibility of Evidence Tending to Identify Accused by His Own Bite Marks*, 77 A.L.R.3D 1122 (1977).
45. Schmitt, *supra* note 26, at 186.

hematoma.[46] Subdural hematoma is an accumulation of blood in the subdural space.[47] The dura are fibrous membranes covering the brain. Acute subdural hematoma presents a life-threatening emergency which may require immediate surgery. In the chronic form of subdural hematoma, blood builds up gradually, and symptoms may not appear until weeks following an abusive attack.[48]

Subdural hematoma is commonly associated with skull fracture. The fracture can be caused by a direct blow or from being hit or thrown against a wall. Nonaccidental subdural hematoma can also occur without skull fracture. In young children, such injury can be caused by violent shaking.[49] Nonaccidental brain and spinal cord injury caused by shaking is often called shaken baby syndrome, or whiplash shaking syndrome.

In many cases, parents state that serious head injury was caused by an accidental fall.[50] Certainly, head injury can occur this way. However, when parents assert that serious head trauma was caused by an accidental fall from a bed, crib, couch, or similar item of furniture, research conducted by Helfer, Slovis and Black dictates a skeptical response.[51]

Helfer and his colleagues studied 161 young children who accidently fell

---

46. For discussion of abusive head injury resulting in death, see Zumwalt & Hirsch, *Pathology of Fatal Child Abuse and Neglect*, in THE BATTERED CHILD 259-65 (R. Helfer & R. Kempe 4th ed. 1987).

47. DORLAND'S ILLUSTRATED MEDICAL DICTIONARY 588 (26th ed. 1981).

48. *Id.* at 409, 1017.

49. For cases involving nonaccidental whiplash injury caused by shaking, see *In re* James B., 166 Cal. App. 3d 934, 939, 212 Cal. Rptr. 778, 781 (1985); State v. Gordon, 738 P.2d 404, 405 (Colo. Ct. App. 1987); State v. McClary, 207 Conn. 233, 541 A.2d 196 (1988); Brown v. State, 512 N.E.2d 173, 175 (Ind. 1987); State v. Bolden, 501 So. 2d 942, 947 (La. Ct. App. 1987); State v. Ostlund, 416 N.W.2d 755 (Minn. Ct. App. 1987); *In re* E.J., 741 S.W.2d 892, 893 (Mo. Ct. App. 1987). *See also* Caffey, *The Whiplash Shaken Infant Syndrome: Manual Shaking by the Extremities with Whiplash-Induced Intracranial and Intraocular Bleedings, Linked with Residual Permanent Brain Damage and Mental Retardation*, 54 PEDIATRICS 396 (1974); Dykes, *The Whiplash Shaken Infant Syndrome: What Has Been Learned?*, 10 CHILD ABUSE & NEGLECT 211 (1986).

50. *See, e.g.*, Cohoon v. United States, 387 A.2d 1098 (D.C. 1978). In *Cohoon*, the defendant was found guilty of mayhem, malicious disfigurement and cruelty to children. The defendant's seven-month-old son had suffered head injuries while in defendant's care. The defendant "testified that he had been lifting the baby out of the crib when he accidentally dropped the baby to the floor." *Id.* at 1099. Two physicians testified for the government:

> According to Dr. Falik, qualified as an expert in the field of neurological surgery, and Dr. David Breckbill, a pediatric neuroradiologist at Children's Hospital, the child's injuries were the result of his skull striking a flat surface at an accelerated rate of speed. In their opinion, the degree of acceleration necessary to produce the injuries was greater than, and inconsistent with, [defendant's] explanation of how the injuries occurred.

Id.

51. Helfer, Slovis & Black, *Injuries Resulting When Small Children Fall Out of Bed*, 60 PEDIATRICS 533 (1977).

out of cribs or beds. Fully 80% of the children were uninjured. Seventeen percent had a minor injury such as a bruise or cut. Only two children had skull fractures. Importantly, *none* of the children had subdural hematomas or serious injury! Based on this research, parents' assertions that serious head injuries were caused by falling out of bed or off a couch are appropriately met with suspicion.[52]

6. Abdominal Injuries

Abdominal injuries are a common cause of death in battered children.[53] Such injuries often result from a punch or kick that compresses the injured organ against the spinal column. Significant force is needed to inflict such injuries, and expert testimony describing such force is often compelling. In *State v. Johnson*,[54] for example, a physician stated that a child's fatal injuries were caused by "a concentrated force comparable to what . . . would result from a fifty or sixty mile per hour head-on collision.[55]

7. Child Abuse by Burning

Burns caused by scalding water are the most common type of inflicted burn.[56] Nonaccidental burns are often inflicted as punishment.[57] The child may be held under scalding tap water or restrained in a tub of hot water.[58]

Dr. Kenneth Feldman writes:

> When hot water has just been drawn, the bottom of the sink or tub remains at a lower temperature than the water it contains. If an infant's body is forcibly opposed to the bottom of the container, it may be spared burning. This creates an unburned central area—the hole in the doughnut effect. . . . An unrestrained child in a tub of hot water may be unable to extricate himself, but will usually thrash about, creating splash burns, [and] blurring of the waterline margin, ... When restrained, such splashing and blurring may be minimal, and clear margins of the burn allow one to reconstruct the child's posi-

---

52. *See id.* at 535, where the authors write that "we must conclude that severe head injury and damage or injury of any type are extremely rare when children, ages 5 years or less, fall out of bed." It should be noted, however, that despite the results of this study, serious accidental head injury does occasionally result from what appears to be a minor fall. *See* Zumwalt & Hirsch, *supra* note 46, at 260.

53. *See* Zumwalt & Hirsch, *supra* note 46, at 265-66; Schmitt, *supra* note 26, at 189-90.

54. 135 Wis. 2d 453, 400 N.W.2d 502 (Ct. App. 1986).

55. *Id.* at 460, 400 N.W.2d at 505; *see also* State v. Jurgens, 424 N.W.2d 546, 549 (Minn. Ct. App. 1988) (physician testified child's injuries were "caused by an external force or trauma equivalent to the force generated in a train wreck").

56. Feldman, *Child Abuse by Burning*, in THE BATTERED CHILD 199 (R. Helfer & R. Kempe 4th ed. 1987).

57. *Id.* at 201.

58. For a case in which a child suffered nonaccidental burns, see State v. Moyer, 151 Ariz. 253, 727 P.2d 31 (Ct. App. 1986).

tion in the water.[59]

Burns which leave clear margins on the extremities are frequently called stocking or glove burns.[60] One would usually expect to see splash burns caused by the child's efforts to free herself, rather than distinct margins.

In addition to scald burns, contact with hot surfaces or cigarettes can cause inflicted burns. Dr. Feldman describes such burns as follows:

> Contact burns are the second most frequent cause of abusive burns. A majority involve contact with hot metal objects such as irons, stove burners, or heater grates. If such injuries occur by accident, brief, glancing contact of exposed body parts with a small portion of the hot surface is the rule. Abusive acts may result in prolonged, steady contact with a large portion of the hot surface. Symmetrical, deep imprints with crisp margins of the entire burning surface will suggest abuse, as opposed to small burn areas with slurred margins lacking a full imprint of the burning surface. Accidental contact burns are usually deeper and more intense on one edge of the burn. Burning of areas of the body where accidental brushing contact is unlikely, such as buttocks or perineum, suggests abuse. . . . Abusive contact burns also occur when small objects are heated and used to brand children. The top of metal cigarette lighters and knife blades are commonly used. Clear imprints of the burning object are often seen.
>
> A separate group of contact burns is seen in our cigarette-smoking culture. Adults often have burning cigarettes on hand during times of frustration and may inflict deep, circular cigarette burns on their children. These burns are often grouped and multiple, most often involving the hands and arms. Although accidental cigarette burns occur when a child brushes against a lighted cigarette that an adult is holding, these injuries are usually single, shallower, and not circular. Abuse should be suspected when cigarette burns are present on normally clothed body parts.[61]

8. Fractures

Many abused children suffer nonaccidental fractures. "A classic feature of the battered-child syndrome is 'multiple fractures at different stages of healing.' "[62] Inflicted fractures are caused by direct blows, twisting, shaking, and squeezing.[63] As is true with other nonaccidental injuries, there is often a discrepancy between the parents' explanation of how a fracture happened, and

---

59. Feldman, *supra* note 56, at 201.

60. For a case where a child suffered a glove burn, see State v. Campbell, 316 N.C. 168, 340 S.E.2d 474 (1986).

61. Feldman, *supra* note 56, at 205-06 (citations omitted). For a case in which a child suffered cigarette burns, see Grier v. State, 257 Ga. 584, 361 S.E.2d 379 (1987).

62. Swischuk, *Radiology of the Skeletal System*, in CHILD ABUSE AND NEGLECT: A MEDICAL REFERENCE 253, 262 (N. Ellerstein ed. 1981).

63. *Id.* at 254. In one case a child suffered rib fractures. An expert testified that such injuries could not be the result of hugging. State v. Muniz, 150 N.J. Super. 436, 441, 375 A.2d 1234, 1236 (1977).

the "mechanism required for its production."[64] In many cases the physician can employ X-rays to determine that fractures occurred at different times.[65]

9. Summary

In many cases, a knowledgeable physician can differentiate accidental from nonaccidental injury. Unbeknownst to the perpetrator, abuse often leaves an indictment etched in human flesh. When the abuser describes how the injury occurred, the explanation seems transparently improbable, even ludicrous, and the doctor's diagnosis is confirmed.

C. Photographs as an Adjunct to Expert Testimony

In physical abuse litigation, photographs of the injured child play an important role. Few sights are more unsettling than a picture of a severely injured child. The normal response combines revulsion, rage, and deep pity. Photographs can have tremendous evidentiary value, but they are also loaded with potential prejudice. Defense counsel can be expected to mount a strong campaign to keep them away from the jury. In most cases, however, the finder of fact is permitted to see photographs of the victim.

Photographs of the child are generally admissible to clarify the testimony of the expert, as well as for other purposes.[66] Two cases provide useful guide-

---

64. Swischuk, *supra* note 62, at 262.

65. *Id.* at 263-69.

66. *See* United States v. Bowers, 660 F.2d 527, 529 (5th Cir. 1981). In *Bowers* the court stated:

> Appellant argues that the jury was unduly prejudiced by the government's introduction in evidence of a color photograph of the child's lacerated heart. The photograph was clearly relevant. Under Fed. R. Evid. 403, however, the court may have been required to exclude the evidence "if its probative value [was] substantially outweighed by the danger of unfair prejudice." The court's decision to allow the evidence, after striking this balance, is reversible error only if we find that it was an abuse of discretion. . . . To be sure, the photograph had the potential to inflame the jury, but we consider it no more inflammatory than photographs that portray the sort of death suffered by the victim in this or any other case where the circumstances surrounding death are at issue. . . . The photograph, here, was essential to the government's case if it was to meet its burden of showing that appellant brought cruel and excessive physical force to bear on her child. We cannot say that the prejudice inherent in the photograph substantially outweighed its probative value. We hasten to add that the mere fact that appellant stipulated with the government as to the cause of death did not preclude the government from offering proof on that issue.

Id. at 529-30 (citations omitted). *See also* State v. Swafford, 21 Ariz. App. 474, 520 P.2d 1151 (1974); Watson v. State, 290 Ark. 484, 720 S.W.2d 310 (1986) (adult murder victim; case contains a good analysis of when photographs of a victim are admissible); *In re* Brooks, 63 Ill. App. 3d 328, 379 N.E.2d 872 (1978); State v. Conlogue, 474 A.2d 167 (Me. 1984); State v. Durfee, 322 N.W.2d 778 (Minn. 1982); Wetz v. State, 503 So. 2d 803 (Miss. 1987); State v. Hotchkiss, 127 N.H. 260, 525 A.2d 270 (1987).

lines for the admissibility of photographs. In *Watson v. State*,[67] the Supreme Court of Arkansas considered the admissibility of photographs in a capital felony murder case involving an adult victim. The court wrote:

> The admissibility of photographs is within the sound discretion of the trial court and will not be reversed absent an abuse of that discretion . . . . The fact that photographs are inflammatory is not sufficient reason alone to exclude them . . . . Inflammatory photographs are admissible in the discretion of the trial judge if they tend to shed light on any issue, enable a witness to better describe the objects portrayed, permit the jury to better understand the testimony, or corroborate testimony.[68]

In *Wetz v. State*,[69] the Mississippi Supreme Court considered the admissibility of photographs taken of a battered infant while she was being treated in the emergency room. The court found four justifications to support admission of the photographs:

> First, they were properly admitted to show the condition of Kristina immediately after the incident. . . . Second, they portray pictorially the extent of the head and facial trauma observed by the witnesses and described [at trial] by Dr. Sheffield, the attending physician. Third, the pictures had the potential of clarification, or making more certain, that which occurred. . . . Finally, the photographs depicted the multiple bruises on Kristina's head which were evidence of malice, an essential ingredient of the crime charged . . . .[70]

The old bromide that a picture is worth a thousand words is nowhere more true than in child abuse litigation, and absent a substantial showing of unfair prejudice, courts admit photographs.

D. Foundation and Permissible Bases for Expert Testimony on Battered Child Syndrome

Before expert testimony on battered child syndrome is admissible, the proper foundation must be laid. This foundation consists of three components. First, the topic of the testimony must be a proper subject for expert opinion.[71] This requirement is satisfied if the testimony will assist the fact finder to understand the evidence or determine the facts in issue. Second, if the opinion is based on a scientific test or principle, the test or principle must be generally accepted in the relevant scientific community.[72] Third, the witness must be

---

67. 290 Ark. 484, 720 S.W.2d 310 (1986).
68. *Id.* at 486-87, 720 S.W.2d at 311 (citations omitted).
69. 503 So. 2d 803 (Miss. 1987).
70. *Id.* at 812 (citations omitted).
71. C. MCCORMICK, MCCORMICK ON EVIDENCE § 13, at 33 (E. Cleary 3d ed. 1984).
72. When expert testimony is based on a scientific test or principle, the proponent of the evidence must establish that the test or principle has gained general recognition in the relevant scientific community. The necessity to establish the acceptability of the test or principle is commonly referred to as the *Frye* test, derived from Frye v. United States, 293 F. 1013 (D.C. Cir. 1923).

qualified as an expert in the field. These three foundational components of expert testimony are discussed in subsection 1, below.

In addition to the foundational requirements for expert testimony, several additional considerations require discussion. What are the permissible bases of an expert's opinion? May an expert opinion be based on inadmissible evidence? On prejudicial evidence? Must an expert have personal knowledge of the facts? Can the opinion of an expert address the ultimate issue in the case? These questions are discussed in subsection 2, below.

1. Laying the Foundation for Expert Testimony

The first foundational requirement for expert testimony is easily satisfied. Courts routinely hold that battered child syndrome is a proper subject for expert testimony.[73] Expert testimony assists the trier of fact to understand whether a child's injuries are accidental or inflicted. As the discussion in subsection I B, above, makes clear, the diagnosis of battered child syndrome calls for expertise that is well beyond the ken of the average juror. Thus, expert testimony satisfies the requirement that it help the jury determine the facts of the case.

The second foundational requirement is that scientific tests or principles—including battered child syndrome—must be generally accepted in the relevant scientific community.[74] Battered child syndrome is well accepted by medical science, and it should not be necessary to lay a foundation with regard to acceptance of the syndrome.[75] However, in the unlikely event that a court requires proof of general acceptance, several approaches are possible. The foundation may be laid by demonstrating that other courts have found the syndrome to be generally accepted. Such proof is readily at hand because all appellate courts to consider expert testimony on battered child syndrome have approved it.[76] Another approach is to provide the court with the literature on battered child syndrome. The stature of the authors and the number of books and articles should persuade the court that the syndrome is generally accepted. The most complex and time-consuming approach is to call experts on the battered child syndrome to explain the syndrome and vouch for its acceptance. To reiterate, however, battered child syndrome is so widely accepted in the medi-

---

73. *See, e.g.*, State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 409 (1985) ("special skill or knowledge, beyond the ken of the average juror, . . . helpful to the determination of an ultimate issue"); State v. Wilkerson, 295 N.C. 558, 569, 247 S.E.2d 905, 911 (1978) ("person of ordinary experience would not be capable of satisfactory conclusions, unaided by expert information"); Commonwealth v. Rogers, 364 Pa. Super. 477, ____, 528 A.2d 610, 616 (1987) ("helpful to the jury's understanding of the nature, extent, and severity of . . . injuries").

74. *See supra* note 72. It should be noted that not all jurisdictions follow the general acceptance test for admission of novel scientific evidence. 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE ¶ 703 [03] (1988).

75. *See supra* note 5.

76. *See* cases cited *supra* note 6.

cal and legal worlds that foundational proof of general acceptance should be unnecessary.

The third foundational requirement is that the witness must possess sufficient "knowledge, skill, experience, training, or education" to give an expert opinion.[77] Qualifying the expert usually involves eliciting information on the witness's educational accomplishments, specialized training, and relevant experience. Thus, an expert on battered child syndrome could be asked about:

1) where she obtained her medical degree,

2) whether she is board-certified or has an area of specialty,

3) whether she received any training in the type of injuries sustained by the child,

4) Whether she received any training, has attended any seminars, or completed any classes that specifically dealt with battered child syndrome,

5) whether she belongs to any professional organizations which focus on child maltreatment,

6) whether she has published in the area,

7) particular experience with the type of injury (bruising, burns, fractures) suffered by the child,

8) the number of cases of battered child syndrome which she has diagnosed or treated,

9) the number of years in the field, and

10) whether she has been qualified as an expert on child abuse in prior proceedings.[78]

Unless a witness is clearly unqualified, deficiencies in qualifications go to the weight accorded the witness's testimony rather than its admissibility.[79] A witness need not be the foremost authority on battered child syndrome, nor must she understand every nuance of the subject. In *State v. Best*,[80] for example, the defendant challenged the qualifications of two physicians. One was an orthopedic surgeon and the other a radiologist. The orthopedic surgeon testified that the victim's fractured arm was probably the result of child abuse. The radiologist testified that the twisting force required to produce the fracture could not have resulted from the child sticking an arm through crib bars.[81] The defendant claimed that the surgeon was not qualified in the area of

77. FED. R. EVID. 702.

78. *See, e.g.*, the sample questions in E. IMWINKELRIED, EVIDENTIARY FOUNDATIONS 137 (1980).

79. *See, e.g.*, State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 409-10 (1985) ("Any deficiencies in the testimony . . . go to its weight rather than to its admissibility. The weight and credibility to be given an expert's testimony are matters to be decided by the factfinder.").

80. 89 S.D. 227, 232 N.W.2d 447 (1975).

81. *Id.* at 237, 232 N.W.2d at 453.

child abuse and that the radiologist was not qualified on the force needed to produce such a fracture. The court rejected both challenges. Using an "abuse of discretion" standard of review, the South Dakota Supreme Court upheld the trial court decision permitting the physicians to testify.[82] The court noted that "[t]he great weight of authority holds that [requiring witnesses to be qualified as specialists in every aspect of the diagnosis is] unnecessary, and that, while lack of specialization may affect the weight of the testimony, the trial judge need not find such expert testimony incompetent."[83] In the great majority of cases the expert's practice does not focus exclusively or even primarily on child abuse. Yet, most pediatricians,[84] radiologists,[85] pathologists,[86] and emergency room physicians[87] possess the training and experience required to testify as experts on battered child syndrome.

While highly specialized expertise in the field of child abuse is not required of the expert, such expertise is certainly desirable from the proponent's perspective. The qualifications of an expert serve two purposes. The first is merely to surmount the foundational hurdle of convincing the judge that the witness is qualified as an expert.[88] For this purpose, a minimal level of education and experience is sufficient. The second purpose, however, is to impress the fact finder, and to convince it to accord great weight to the expert's opinion. On this score the proponent desires an eminently qualified expert. The more impressive the better.

2. Parameters of Expert Testimony

Once a witness is qualified as an expert on battered child syndrome, a number of issues arise. The first concerns the basis of the expert's opinion. Under the Federal Rules of Evidence, an expert witness may state her opinion

---

82. *Id.* at 238, 232 N.W.2d at 454.

83. *Id.* at 239, 232 N.W.2d at 454.

84. *See, e.g.*, People v. Gordon, 738 P.2d 404, 406 (Colo. Ct. App. 1987).

85. State v. Best, 89 S.D. 227, 237, 232 N.W.2d 447, 453 (1975).

86. *See, e.g.*, State v. Jurgens, 424 N.W.2d 546, 549 (Minn. Ct. App. 1988) (medical examiner); State v. Wilkerson, 295 N.C. 559, 568-69, 247 S.E.2d 905, 911 (1978); Commonwealth v. Rodgers, 364 Pa. Super. 477, ____, 528 A.2d 610, 613 (1987).

87. Emergency room physicians see many cases of accidental childhood injury and, as the court stated in State v. Mulder, 29 Wash. App. 513, 629 P.2d 462 (1981), the battered child syndrome diagnosis is "within the area of expertise of physicians whose familiarity with numerous instances of injuries accidentally caused qualifies them to express with reasonable probability that a particular injury or group of injuries to a child is not accidental or is not consistent with the explanation offered therefore." *Id.* at 515, 629 P.2d at 463.

88. The qualifications of an expert are considered a question for the judge, not the jury. For example, under Federal Rule of Evidence 104(a), the judge must be satisfied that the witness is qualified on the subject of the opinion before the jury can hear the opinion.

without specifying the factual bases for the opinion.[89] As a practical matter, however, the expert is nearly always asked to provide the factual data on which the opinion is premised. This information may precede or follow the opinion itself. Asking the expert to elaborate on the bases for her opinion aids the trier of fact to understand the opinion. The explanation also provides the expert an opportunity to build rapport with the jury and to educate the jurors about the subject at hand. The net effect is to strengthen the impact of the expert's testimony.

The facts on which an expert may base an opinion come from a variety of sources. In many cases the witness has first hand knowledge of the child because the doctor was personally involved in the child's treatment or, in case of death, because the doctor performed the autopsy. First hand knowledge is not required, however, and a properly qualified expert may render an opinion on battered child syndrome even though the expert has not personally examined the child.[90] In such cases the expert learns the facts of the case by reviewing medical and other pertinent records. In *State v. Moyer*,[91] for example, the defendant argued that a doctor's testimony should be excluded because the doctor had not personally examined the child, but had simply reviewed records and photographs of the child. The court rejected defendant's argument, and stated:

> We find no requirement and do not consider it imperative that the doctor actually examine the child. [The doctor] was an expert, he understood the [battered child] syndrome and he knew what factors to look for. He had sufficient evidence before him from which he could formulate his expert opinion.[92]

In rare cases the expert learns the facts by listening to evidence at trial or by responding to a recitation of the evidence from an attorney. In these cases the expert is asked to respond to a hypothetical question. The once ubiquitous hypothetical question is disappearing from practice,[93] and trial counsel seldom utilize this rather cumbersome technique to present expert testimony on battered child syndrome. Occasionally, however, a hypothetical question is an ap-

---

89. FED. R. EVID. 705 provides:

> The expert may testify in terms of opinion or inference and give reasons therefor without prior disclosure of the underlying facts or data, unless the court requires otherwise. The expert may in any event be required to disclose the underlying facts or data on cross-examination.

Prior to the more modern rules, such as the Federal Rules of Evidence, traditional practice required the expert to state the factual basis prior to giving the opinion, at least where the opinion was not based on personally observed facts. *See* 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE § 705[01], at 705-4 (1987). This requirement is what made hypothetical questions *de rigueur* — they were statements of all underlying facts being considered by the expert. *See* 3 D. LOUISELL & C. MUELLER, FEDERAL EVIDENCE § 399, at 703 (1979).

90. FED. R. EVID. 703.

91. 151 Ariz. 253, 727 P.2d 31 (Ct. App. 1986).

92. *Id.* at ____, 727 P.2d at 34.

93. *See supra* note 89.

propriate vehicle for presenting expert testimony.[94]

In most jurisdictions an expert may base an opinion on information that would not be independently admissible in evidence, provided such information is "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject."[95] Permitting experts on battered child syndrome to formulate *ad*missible opinions on the basis of *in*admissible evidence requires the court to determine what types of facts or data are "reasonably relied upon" by experts on child abuse.

The potentially inadmissible evidence that is most frequently relied on by experts on battered child syndrome is verbal and written hearsay. Writings that are important to a diagnosis of battered child syndrome include medical records and police, autopsy, and social welfare agency reports. In *State v. Tanner*,[96] for example, the expert based his opinion of battered child syndrome partly upon police records, an autopsy report, and the neurosurgeon's report.[97] In *State v. Best*,[98] the expert relied on his personal observations and on hospital records.[99] Verbal statements by the defendant, the child, and others are often pertinent to the expert in forming a diagnosis. For example, in *People v. Gordon*,[100] the expert reached a diagnosis of child abuse by considering the inconsistencies among the defendant's explanations of the child's injuries.[101] The records and verbal statements relied on in *Tanner* and *Gordon* are potentially barred by the hearsay rule. Yet, in most jurisdictions the expert may rely on such information to formulate a diagnosis of battered child syndrome.

The question remains, however, may an expert rely on any inadmissible evidence? For example, will any hearsay suffice, no matter how unreliable? In their influential treatise on the Federal Rules of Evidence, Judge Weinstein and Professor Berger grapple with this difficult question.[102] They identify two views. Under the restrictive view, it is considered unreasonable to rely on hear-

---

94. *Cf.*, Cohoon v. United States, 387 A.2d 1098 (D.C. 1978), where a medical examiner who had looked at x-rays, treating physician reports, and listened to the defense experts, was asked if the child's injuries were consistent with being "swung, thrown or thrust onto a large flat surface." *Id.* at 1099. The defense objected that the question assumed facts not in evidence. The court rejected this argument, stating that "[e]ach side has the right to elicit an opinion from such a witness upon any hypothetical reasonably consistent with the evidence." *Id.* at 1100 (citing Moyer v. Aetna Life Ins. Co., 126 F.2d 141, 144 (3d Cir. 1942)). In particular, the court found that, where "appellant's explanation was medically implausible, it was reasonable and proper for the prosecutor to inquire whether an alternative explanation would be more reconcilable with the facts." *Id.*

95. FED. R. EVID. 703.

96. 675 P.2d 539 (Utah 1983).

97. *Id.* at 544.

98. 89 S.D. 227, 232 N.W.2d 447 (1975).

99. *Id.* at 240, 232 N.W.2d at 455.

100. 738 P.2d 404 (Colo. Ct. App. 1987).

101. *Id.* at 406-07.

102. 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE § 703[03], at 703-16 to 22 (1987).

say that would be excluded from evidence. The expansive view allows experts to rely on inadmissible hearsay. Weinstein and Berger write:

> It is apparent from the reported decisions that the courts are loosely divided into two camps in interpreting the second sentence of Rule 703 [which permits reasonable reliance on inadmissible evidence]. . . those favoring the admissibility of expert testimony and those taking a far more restrictive view. Those courts which endorse a restrictive approach do so not only in criminal cases, . . . but in civil cases as well. The difference between the restrictive and more liberal approach to Rule 703 is one of emphasis. Both groups agree that the trial judge must decide whether the data on which the expert relied is of a type reasonably relied upon in his field of expertise. But the restrictive camp imposes a further requirement: it reassesses the underlying material to determine whether it would have been excluded as hearsay for reasons bearing on reliability, and if so finds that the expert could not reasonably have relied on it, even though he shows that this is the type of material on which he relies in his nontestifying, working life.
>
> . . . .
>
> The difficulty with [the restrictive approach] lies not in the actual results but in the court's apparent assumption that trustworthiness of the underlying data is an independent factor which Rule 703 requires the judge to verify in order for the expert's testimony to pass the threshold of admissibility. Were that so, Rule 703 would be redundant since the hearsay rules would be determinative and the second sentence of Rule 703 would be meaningless, except for saving the proponent of the expert the inconvenience of having to offer the underlying data into evidence.
>
> The authors have found that the more liberal view works quite well in practice. In non-jury cases the judge is fully capable of discounting the probative force of the expert's opinion by considering the source of his data. And, in jury cases, when the matter is brought to the jurors' attention by a proper instruction, they show a full sensitivity to the problem—in fact often discounting the expert's opinion too much when it is based on hearsay or secondary evidence of documents or the like. . . .[103]

The expansive view is in accord with child abuse experts' activities in the real world, and with the spirit of the Federal Rules of Evidence. Physicians should be permitted to base a diagnosis of battered child syndrome on hearsay or other inadmissible evidence. The reliability of the inadmissible evidence goes to the weight to be accorded the expert's opinion, not to its admissibility.

Rather than attack the basis of an expert's opinion in the hope of excluding the testimony altogether, a party may acquiesce in the testimony but seek to blunt its sting by convincing the court to preclude the expert from divulging one or more of the bases supporting the opinion. Such an argument proceeds on the theory that disclosure of the basis of the opinion would cause unfair prejudice, confusion of the issues, or misleading of the jury.[104] For example, in

---

103. *Id.* at 703-17 to 19.
104. *See* FED. R. EVID. 403.

People v. Gordon,[105] the expert considered the defendant's "prior violent behavior toward the child" in forming his opinion.[106] Although the expert was permitted to testify, the trial court precluded him from articulating his reliance on the violent behavior as a basis for his opinion, concluding that disclosure of such reliance would be unduly prejudicial.[107] A similar argument can be made for precluding an expert from describing her reliance on unreliable and inadmissible hearsay statements. The danger is sometimes too great that the jury will fail to confine its consideration of the hearsay to an evaluation of the expert's opinion, and will instead consider it as substantive evidence of abuse. In most cases a limiting instruction should protect against such misuse of inadmissible information. In some cases, however, it is proper to limit disclosure of the bases underlying the expert's opinion.

The defendant also may attack an expert's opinion by asserting that the opinion relates to the ultimate issue in the case and thus usurps the function of the jury. In bygone days this objection might have succeeded. In most jurisdictions today, however, expert testimony is not objectionable because it embraces an ultimate issue. Rule 704 of the Federal Rules of Evidence typifies the modern approach, stating that "[t]estimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact." As the court concluded in *State v. Wilkerson*,[108] "the inquiry should not be whether [the expert opinion] invades the province of the jury, but . . . whether the witness because of his expertise is in a better position to have an opinion on the subject than is the trier of fact."[109] The Pennsylvania Superior Court, in *Commonwealth v. Rodgers*,[110] similarly held that battered child syndrome testimony "did not usurp the role of the jury on deciding an ultimate issue."[111] The jury is free to reject the expert's opinion.[112]

E. Evidence of Uncharged Misconduct to Prove Nonaccidental Injury

The preceding subsections concentrated on medical evidence of battered child syndrome. This subsection focuses upon the probative value of the defendant's uncharged misconduct. While the two modes of proof achieve the same result—proof of nonaccidental injury—they rely on different theories of

105. 738 P.2d 404 (Colo. Ct. App. 1987).
106. *Id.* at 406.
107. *Id.*
108. 295 N.C. 559, 247 S.E.2d 905 (1978).
109. *Id.* at 569, 247 S.E.2d at 911. One expert testified that the chest injuries were not accidental; the other testified that the child was a "battered child" and that the syndrome typically occurs where a caretaker injures the child. *Id.* at 564-65, 247 S.E.2d at 908-09.
110. 364 Pa. Super. 477, 528 A.2d 610 (1987).
111. *Id.* at ____, 528 A.2d at 615.
112. *Id.*

logical relevance.[113]

A cardinal principle of American law holds that evidence of a person's character generally is not admissible to prove that she acted in conformity with her character on a particular occasion. Teitelbaum and Hertz describe this principle as follows:

> The law makes inadmissible, with certain exceptions, evidence relevant on the following theory: Defendant committed a wrong in the past; defendant therefore has a propensity or a character trait for committing wrongful acts; therefore defendant is more likely to have engaged in the act for which he is on trial than is someone not known to have this character trait.[114]

This maxim finds expression in Rule 404(a) of the Federal Rules of Evidence, which states that "[e]vidence of a person's character or a trait of character is not admissible for the purpose of proving action in conformity therewith on a particular occasion."

There are numerous uses of uncharged misconduct evidence which do not violate the rule against propensity evidence. The most common are set forth in Rule 404(b) of the Federal Rules of Evidence:

> Evidence of other crimes, wrongs, or acts is not admissible to prove the character of a person in order to show action in conformity therewith. It may, however, be admissible for other purposes, such as proof of motive, opportunity, intent, preparation, plan, knowledge, identity, or absence of mistake or accident.

In child abuse litigation, all of these exceptions play a role.[115] For present purposes, however, discussion is limited to evidence of uncharged misconduct offered to prove nonaccidental injury. In this regard, two theories of proof are relevant: (1) The doctrine of chances, and (2) Proof of a person's intent when she committed uncharged acts of abuse to establish her intent when she committed a charged act of abuse.

1. The Doctrine of Chances

Many child abuse cases stand or fall on the prosecutor's ability to overcome a claim of inadvertence or accident. In this regard the state's evidence frequently rests in part on the doctrine of chances or probabilities.[116] In his classic description of this mode of proof, Wigmore writes:

---

113. *See, e.g.*, State v. Tanner, 675 P.2d 539, 545 (Utah 1983). E. IMWINKELRIED, UNCHARGED MISCONDUCT EVIDENCE (1984); Myers, *Uncharged Misconduct Evidence in Child Abuse Litigation*, 1988 UTAH L. REV. ____.

114. Teitelbaum & Hertz, *Evidence II: Evidence of Other Crimes as Proof of Intent*, 13 N.M. L. REV. 423, 423-24 (1983).

115. *See* Myers, *supra* note 113. The permissible uses of uncharged misconduct evidence expressly set forth in Rule 404(b) do not exhaust the theories on which such evidence is admissible.

116. For helpful discussion and analysis of the doctrine of chances, see E. IMWINKELRIED, *supra* note 113, § 2:05, at 2-8, 2-9.

> To prove intent, as a general notion of criminal volition or wilfulness, . . . the argument . . . is purely from the point of view of the doctrine of chances—the instinctive recognition of that logical process which eliminates the element of innocent intent by multiplying instances of the same result until it is perceived that this element cannot explain them all. Without formulating any accurate test, and without attempting by numerous instances to secure absolute certainty of inference, the mind applies this rough and instinctive process of reasoning, namely, that an unusual and abnormal element might perhaps be present in one instance, but that the oftener similar instances occur with similar results, the less likely is the abnormal element likely to be the true explanation of them.
>
> Thus, if A while hunting with B hears the bullet from B's gun whistling past his head, he is willing to accept B's bad aim or B's accidental tripping as a conceivable explanation; but if shortly afterwards the same thing happens again, and if on the third occasion A receives B's bullet in his body, the immediate inference (i.e., as a probability, perhaps not a certainty) is that B shot at A deliberately; because the chances of an inadvertent shooting on three successive similar occasions are extremely small; or (to put it in another way) because inadvertence or accident is only an abnormal or occasional explanation for the discharge of a gun at a given object, and therefore the recurrence of a similar result (here in the shape of an unlawful act) tends (increasingly with each instance) to negative accident or inadvertence or self-defense or good faith or other innocent mental state, and tends to establish (provisionally, at least, though not certainly) the presence of the normal, i.e., criminal, intent accompanying such an act and the force of each additional instance will vary in each kind of offense according to the probability that the act could be repeated, within a limited time and under given circumstances, with an innocent intent.[117]

Additional insight into the doctrine of chances comes from the New Hampshire Supreme Court's 1876 decision in *State v. Lapage*,[118] where Chief Justice Cushing wrote:

> Another class of cases consists of those in which it becomes necessary to show that the act for which the prisoner was indicted was not accidental,—e.g., where the prisoner had shot the same person twice within a short time, or where the same person had fired a rick of grain twice, or where several deaths by poison had taken place in the same family, or where children of the same mother had mysteriously died. In such cases it might well happen that a man should shoot another accidently, but that he should do it twice within a short time would be very unlikely. So, it might easily happen that a man using a gun might fire a rick of barley once by accident, but that he should do it several times in succession would be very improbable.
>
> So, a person might die of accidental poisoning, but that several persons should so die in the same family at different times would be very unlikely.
>
> So, that a child should be suffocated in bed by its mother might happen

117. 2 J. WIGMORE, WIGMORE ON EVIDENCE § 302, at 241 (Chadbourn rev. 1979).

118. 57 N.H. 245 (1876).

once, but several similar deaths in the same family could not reasonably be accounted for as accidents.[119]

Two hypothetical cases illustrate the use of the doctrine of chances to disprove accident or inadvertence.

Case 1. Defendant is accused of murdering his four-year-old son. The boy died from a skull fracture and brain injury. The defendant is charged with inflicting these injuries. The child was rushed to the hospital, where he died. The hospital staff noted that in addition to the fatal head injury, the child had multiple old and new bruises on his buttocks, lower back, abdomen, chest, and genitals. Defendant claims that the child was accident prone and that the skull fracture was accidental. To counter this defense, the state offers proof that the child suffered many soft tissue injuries over a six month period of time. Defendant is not charged with the soft tissue injuries.

The state's evidence should be received to rebut the defense of accident. It is in the nature of children to suffer minor scrapes and bruises. Furthermore, an occasional accident causes more serious injury. It is highly unlikely, however, that a healthy child will accidentally suffer multiple serious soft tissue injuries over a relatively short period of time. Such repeated injuries are probably the result of human design rather than accident.[120] Evidence of the child's sad history reduces the likelihood that the fatal injury was accidental.[121]

The doctrine of chances does not require proof that defendant committed the uncharged or the charged acts of abuse. Under the doctrine, the identity of the person or persons committing uncharged acts is unimportant. Thus, anonymous acts are admissible to prove that a charged act was deliberate.[122] The

---

119. *Id.* at 294.

120. *See* Schmitt, *The Child with Nonaccidental Trauma*, in THE BATTERED CHILD 128, 130-37 (R. Helfer & R. Kempe 4th ed. 1987).

121. Numerous child homicide cases discuss use of uncharged misconduct to rebut a claim of accident or to prove intent. *See, e.g.*, United States v. Leight, 818 F.2d 1297 (7th Cir. 1987), *cert. denied*, 108 S. Ct. 356 (1987); United States v. Harris, 661 F.2d 138 (10th Cir. 1981); United States v. Woods, 484 F.2d 127 (4th Cir. 1973), *cert. denied*, 415 U.S. 979 (1974); United States v. Grady, 481 F.2d 1106 (D.C. Cir. 1973); Harvy v. State, 604 P.2d 586 (Ala. 1979) (defendant did not defend on the basis of accident, therefore, it was error to admit uncharged misconduct evidence relating to accident); Limber v. State, 264 Ark. 479, 572 S.W.2d 402 (1978); People v. Wade, 43 Cal. 3d 366, 729 P.2d 239, 233 Cal. Rptr. 48 (1987); People v. Taggart, 621 P.2d 1375 (Colo. 1981); State v. Wilson, 199 Conn. 417, 513 A.2d 620 (1986); State v. Tucker, 181 Conn. 406, 435 A.2d 986 (1980); Bludsworth v. State, 98 Nev. 289, 646 P.2d 558 (1982); State v. Stevens, 238 N.W.2d 251 (N.D. 1975); Freeman v. State, 681 P.2d 84 (Okla. Crim. App. 1984); State v. Holland, 346 N.W.2d 302 (S.D. 1984); State v. Tanner, 675 P.2d 539 (Utah 1983); State v. Mercer, 34 Wash. App. 654, 663 P.2d 857 (1983).

122. *See, e.g.*, Bludsworth v. State, 98 Nev. 289, 290, 646 P.2d 558, 559 (1982). *Bludsworth* involved a murder prosecution where a two-year-old victim died of head injuries. The defendant claimed the injuries were accidental. The court wrote:

During the trial, considerable evidence was presented that Eric had sustained

evidentiary force of the doctrine lies in its ability to persuade the trier of fact that the charged act was deliberately caused by *someone*. The doctrine sheds no light on the identity of the perpetrator, and other evidence must be introduced to tie the defendant to the crime. Wigmore explains the admissibility of anonymous acts as follows:

> It will be seen that the strength of the [doctrine of chances] does not rest exclusively on a given person's connection with the prior injurious transactions. It is possible to negative accident or inadvertence, and to infer deliberate human intent, without forming any conclusion as to the personality of the doer. Thus if, one morning after a high wind, A's cellar window is found broken, the pieces lying inside, he may well assume the probability that the force of the wind blew the glass in; but if, on the next morning and the next, he again finds a window broken in the same way, though no high wind prevailed the night before, he gives up the hypothesis of the force of the wind as the explanation, and concludes that deliberate human effort was the highly probable cause of the breakage, although he can form no notion whatever of the personality of the doer.
>
> Thus it is thus clear that innocent intent—accident, inadvertence, or the like—may be negatived by *anonymous instances* of the previous occurrence of the same or a similar thing. After the defendant's connection with the deed charged is assumed or proved, his innocent intent may be negatived by such instances, which may have force for that purpose, though they are not connected with the defendant.
>
> . . . .
>
> The only limitation upon this mode of proof is that the defendant's doing of the act in issue must be shown by other evidence at some stage of the trial; and the anonymous instances should not be received until the trial court is satisfied with the amount of evidence introduced or pledged for showing that

---

> numerous bruises, including a bite mark on his scrotum, prior to the day of his fatal injury. . . . Appellants also erroneously argue that the bite mark evidence and evidence of other bruises were incompetent because there was no prior establishment, by clear and convincing evidence, that either Curt or Judi was responsible for each of the prior injuries. Admissibility of the bite mark and other bruise evidence does not depend on connecting either defendant to the infliction of the injury. It is independent, relevant circumstantial evidence tending to show that the child was intentionally, rather than accidentally injured on the day in question. Proof that a child has experienced injuries in many purported accidents is evidence that the most recent injury may not have resulted from yet another accident.

Id. at 290-91, 646 P.2d at 559. *See* State v. Mercer, 34 Wash. App. 654, 658, 663 P.2d 857, 861 (1983); E. IMWINKELRIED, *supra* note 113, § 2:05, at 2-8, 2-9; *see also* State v. Stevens, 238 N.W.2d 251 (N.D. 1975). In *Stevens*, the court excluded evidence of anonymous prior injuries to prove intent. However, the decision can be reconciled with the principle that anonymous acts are admissible under the doctrine of chances to prove intent. In *Stevens* the court was particularly troubled by the uncharged misconduct evidence because the state offered the evidence to prove identity as well as intent. When uncharged misconduct is offered to establish identity, anonymous acts are not admissible. The court implied that if the state had limited the uncharged misconduct to proof of intent, the evidence may have been admissible.

connection.[123]

While anonymous acts are admissible under the doctrine of chances, before such evidence may be received the state must establish a connection between the defendant and the injured child or children. For example, suppose the defendant is charged with murdering her child. Her defense is that the child suffered accidental head injuries. The prosecutor cannot disprove the accident theory with evidence that, during the past year, five other children in the city suffered head injuries. The other injuries have no connection to the defendant. However, if the prosecutor establishes that the other victims were all defendant's children, or were all under her care, the evidence becomes highly relevant on the question of accidental injury. This is true even though the state cannot prove that defendant inflicted the other injuries.

Although the evidentiary force of the doctrine of chances is not tied to the identity of the person or persons committing uncharged acts, often the defendant did in fact commit the uncharged acts. Because the identity of the actor is irrelevant under the doctrine of chances, it is sometimes appropriate to exclude evidence that the defendant was the actor on uncharged occasions. Excluding such evidence reduces the possibility of unfair prejudice to the defendant.

> *Case 2.* Defendant is the step-mother of the two-year-old victim. On November 16, 1988, she carried the child to a neighbor's home. The child had a large bruise on his head, and was unconscious. Defendant told the neighbor that, while she was dressing the youngster, he fell and hit his head on the corner of a chair. The child was quickly taken to the hospital, where subdural hematoma was diagnosed. Emergency surgery was performed, saving the child's life. The government charges the defendant with child abuse. Her defense is accident. The court admits testimony from the surgeon that the injury was probably caused by a blunt, flat instrument. The doctor also testifies that the defendant's explanation is inconsistent with the severity of the injury. The government offers evidence that on November 2, 1988, two weeks prior to the charged act, the child was taken to the hospital suffering from severe multiple bruises about the face and body. The state is unable to establish that the child was in defendant's care on the second of November.[124]

This case raises three important issues. First, admissibility of anonymous acts under the doctrine of chances. Second, the applicability of the doctrine when there is only one uncharged act. And third, the applicability of the doctrine when uncharged acts are not identical to the charged act. The first issue was addressed in Case 1. The fact that the government cannot establish the identity of the person causing the November 2nd injury does not undercut the utility of the doctrine of chances to rebut a defense of accident.

On the second issue, some authorities state that multiple uncharged acts are required.[125] Others hold that there is no hard-and-fast rule defining the

---

123. 2 J. WIGMORE *supra* note 117, § 303, at 247-48.

124. Case 2 is based on United States v. Brown, 608 F.2d 551 (5th Cir. 1979).

125. *See* 2 WIGMORE *supra* note 117, § 325, at 287-88. In § 325, Dean Wigmore discusses the doctrine of chances to prove intent in prosecutions for possession of stolen

number of acts required to trigger the doctrine of chances. The latter position was adopted by the Oregon Supreme Court in the case of *State v. Johns*,[126] where the court wrote:

> [I]s one prior similar incident enough to justify admission . . . ? We believe no categorical statement can be made one way or the other. Depending upon the circumstances of the case, sometimes one prior similar act will be sufficiently relevant for admissibility and sometimes not. A simple, unremarkable single instance of prior conduct probably will not qualify, but a complex act requiring several steps, particularly premeditated, may well qualify. These decisions must be made case-by-case. . . .[127]

Professor Edward Imwinkelried shares the Oregon court's view. In his treatise devoted to uncharged misconduct evidence he writes that "[i]n terms of logical relevance theory, . . . even a single similar instance of conduct is material to increase the likelihood of mens rea. So long as the defendant has performed the act 'oftener than once,' the act has some logical relevance on the issue of intent."[128]

In Case 2 there was only one prior incident of injury to the child. Does this single episode invoke the doctrine of chances? While credible arguments are possible both ways, the evidence should be received. The type and severity of the child's injuries on the prior occasion are such that they probably were inflicted deliberately. Multiple bruises over the face and body cannot fairly be described as a "simple, unremarkable single instance of prior conduct."[129] Both logic and policy support the conclusion that in selected cases a single uncharged event will suffice to trigger the doctrine of chances.

The third question raised by Case 2 is the degree of similarity required between the charged act and uncharged acts. The authorities are in general agreement that to invoke the doctrine of chances, the acts must be similar.

---

goods. He writes:

> [T]he recurrence of a like act lessens by each instance the possibility that a given instance could be the result of inadvertence, accident, or other innocent intent. Accordingly, the argument here is that the oftener A is found in possession of stolen goods, the less likely it is that his possession on the occasion charged was innocent. . . . [T]he force of an argument based on the intent theory lies in the multiplication of instances; that a single instance has from this point of view little or no weight. . . .

It is important to note that Wigmore does not say the doctrine of chances never comes into play when there is only one similar occurrence. In § 325, he discusses only possession of stolen property, and in that type of case proof of intent may well require more than a single uncharged episode of possession. In other legal contexts where there is but a single similar act, however, Wigmore may have approved use of the doctrine of chances. *See* Comment, *Admissibility of Evidence of Prior Crimes in Murder Trials*, 25 IND. L.J. 64, 68 n.23 (1949-1950); Note, *The Admissibility of Evidence of Extraneous Offenses in Texas Criminal Cases*, 14 S. TEX. L.J. 69, 96 (1973).

126. 301 Or. 535, 725 P.2d 312 (1986) (en banc).

127. *Id.* at 541-42, 725 P.2d at 324.

128. E. IMWINKELRIED, *supra* note 113, § 5:06, at 5-12.

129. State v. Johns, 301 Or. 535, 555, 725 P.2d 312, 324 (1986) (en banc).

Wigmore writes that "prior acts should be similar. Since it is the improbability of a like result being repeated by mere chance that carries probative weight, the essence of this probative effect is the likeness of the instance."[130] While similarity is required for the doctrine of chances, the acts do not have to be identical.[131] Professor Imwinkelried observes that "[i]f the acts are similar in material respects, the similarity justifies the admission of the acts to disprove innocent intent."[132] In Case 2 the charged injury was a blow to the head causing subdural hematoma. The uncharged injuries also resulted from blows. Further, the earlier incident included head injuries which were similar to, albeit less severe than, the charged offense. The facts in Case 2 satisfy the similarity requirement.

2. Proof of Defendant's Intent When She Committed Uncharged Acts of Abuse to Establish Her Intent When She Committed a Charged Act of Abuse.

In many types of criminal cases the state seeks to prove the defendant's intent when she committed a charged act through evidence of her intent when she committed uncharged acts. For example, in a burglary case, the state may offer proof that, on the night defendant was apprehended inside the house she is accused of burglarizing, she burglarized five other houses on the same block. The fact that defendant entertained felonious intent when she committed the uncharged burglaries renders it more likely that she harbored the same intent when she committed the charged act. Such evidence comes perilously close to violating the rule against propensity evidence to prove conforming conduct.[133] Nevertheless, under the prevailing view, the evidence is admissible to prove intent.

When intent evidence is offered under the prevailing view, courts are understandably cautious. The line (if there is one) separating the legitimate use of such evidence from inadmissible propensity evidence is extremely elusive. Such proof carries strong potential for unfair prejudice. Jurors may be unable to blind themselves to the fact that the defendant is "a very bad man",[134] deserving of punishment, whether he is guilty of the charged offense or not.

When uncharged misconduct is offered under the prevailing view, the proponent must establish that the defendant committed the uncharged acts.[135] Anonymous acts are inadmissible because, unlike the doctrine of chances, the prevailing view is founded on an assumption about human nature. This assumption posits that when a person possesses a particular trait (criminal intent) on one occasion, she is likely—not as a matter of chance or probability,

130. 2 J. WIGMORE *supra* note 117, § 302, at 245 (emphasis deleted).
131. E. IMWINKELRIED, *supra* note 113, § 5:07, at 5-13.
132. *Id.*; *See also* Myers, *supra* note 113; Teitelbaum & Hertz, *supra* note 114.
133. State v. Lapage, 57 N.H. 245, 296 (1876).
134. *Id.* at 296.
135. *See* Myers, *supra* note 113.

but as a matter of human nature—to possess it on other occasions as well.

Case 3 illustrates the prevailing view.

> Defendant is charged with physical abuse leading to the death of her young son. While the child was in the defendant's exclusive control, the child suffered a skull fracture and fatal brain injury. The defendant argues that the child's injury was accidental. To rebut this defense, the state offers evidence that defendant physically abused her other two children. One of the uncharged acts of abuse occurred prior to the charged offense and one after.[136]

The government's uncharged misconduct evidence is admissible under the prevailing view. When the state proves that the defendant committed the uncharged abuse, it is possible to infer her criminal intent on those occasions. From this intermediate inference, the ultimate inference is drawn to her intent when she injured the deceased child.

Notice that in Case 3 the state could also rely on the doctrine of chances to prove intent. It is possible that one of defendant's children could suffer serious accidental injury, but when more than one child is afflicted, the likelihood of accident decreases. As the New Hampshire Supreme Court observed long ago, "that a child should be suffocated in bed by its mother might happen once, but several similar deaths in the same family could not reasonably be accounted for as accidents."[137] Courts regularly admit uncharged abuse of other children to disprove a claim of accident.[138]

In Case 3, one of the uncharged acts of abuse occurred after the charged offense. However, this should not lead to exclusion of the evidence. The temporal relationship between the uncharged misconduct and the charged offense does not undermine the logical relevance of either uncharged act. While there is some authority that uncharged acts must occur prior to the charged act,[139] the better rule predicates admission on logical relevance, not order of occurrence.[140]

---

136. The facts of case 3 are drawn in part from United States v. Leight, 818 F.2d 1297 (7th Cir. 1987).

137. State v. Lapage, 57 N.H. 245, 294 (1876).

138. *See, e.g.*, United States v. Leight, 818 F.2d 1297 (7th Cir. 1987); United States v. Woods, 484 F.2d 127 (4th Cir. 1973); Limber v. State, 264 Ark. 479, 572 S.W.2d 402 (1978); State v. Ostlund, 416 N.W.2d 755 (Minn. Ct. App. 1987) (proper to ask witness to decribe ways in which defendant was careless with other children); People v. Tuckerman, ____ A.D. ____, 521 N.Y.S.2d 553 (1987) (court employs prevailing view to approve testimony that defendant had abused two children in the same household as evidence of intent to injure the victim). For additional cases employing the prevailing view of intent evidence, see United States v. Lewis, 837 F.2d 415 (9th Cir. 1988); State v. Lee, 88 Or. App. 556, 746 P.2d 242 (1987).

139. *See* E. IMWINKELRIED, *supra* note 113, § 2:11, at 2032. Indeed, many lawyers use the phrase "prior bad acts" to describe this category of evidence.

140. *See id.* § 2:00, at 2-33.

II. ESTABLISHING THE IDENTITY OF THE PERPETRATOR

When the nonaccidental nature of child's injuries is established, the inquiry turns to identification of the perpetrator. Identity can be established in many ways.

A. *Eyewitness Testimony by Children*[141]

Children frequently provide eyewitness testimony. Indeed, in child abuse litigation the victim is usually the only eyewitness. Thus, the reliability of eyewitness testimony by children frequently assumes great importance. Psychologists continue their experimental investigation of the reliability of eyewitness testimony, and while few definite answers are available, enough is known to make two statements: (1) children often provide reliable, accurate testimony and (2) psychological experiments on eyewitness testimony by young preschool children indicate that the testimony of such children should be considered with a measure of caution.

In a review of the psychological literature published in 1984, Professors June Chance and Alvin Goldstein report that most of the studies on face recognition in children reveal that younger children perform less well than older children and adults. Chance and Goldstein write:

> [T]he level of accuracy, as assessed by correct identifications, increases with subjects' age . . . . At kindergarten level, percent correct [identifications] falls between 35 and 40% - or only slightly above chance; at 6 to 8 years, between 50 and 58%; at 9 to 11, between 60 and 70%; and at ages 12 to 14, between 70 and 80%. This latter range of performance is quite similar to that found for adults . . . . These findings suggest that children past age 12 years of age are equal to adults in their performance on face-recognition tasks but that younger children are worse. Nonetheless, one must caution that these findings tell us about children's performances only under laboratory conditions; recognition memory assessed in a situation more closely resembling the real-life situation might be different.[142]

Thus, young children make a substantial number of face recognition errors. Chance and Goldstein report a more disturbing finding, however. Young children also tend to make more *inaccurate* identifications than older children and adults. Chance and Goldstein write:

> When false alarm data *are* reported, rates of false positive responding decrease with increased age . . . Young school-age children make quite a few false identifications in proportion to their opportunities to do so; the rate of adolescents (13 years and older) differ little from those of adults.[143]

---

141. This subsection is extracted from J. MYERS, CHILD WITNESS LAW AND PRACTICE 251-54 (1987).

142. Chance & Goldstein, *Face-Recognition Memory: Implications for Children's Eyewitness Testimony*, 40 J. SOC. ISSUES 69, 71 (1984) (citations omitted); *see also* Children's Eyewitness Memory (S. Ceci, M. Toglia & D. Ross eds. 1987).

143. Chance & Goldstein, *supra* note 142 at 72.

In his book on eyewitness testimony,[144] Professor Taylor echoes several of the concerns articulated by Chance and Goldstein. Taylor writes:

> Age can clearly be a factor in a person's ability to perceive an event and later recall it accurately. Generally speaking, psychologists have shown through repeated experiments that there is an improvement of eyewitness capability to the ages of about fifteen or twenty . . .
>
> A child is constantly in a process of development, and his ability to observe, identify an object in his mind, relate it to his environment, remember it, later recall it, and match it with another object — e.g., identify a suspect as the perpetrator seen earlier — will vary according to his stage of development. This is more apparent in the ability to recognize faces . . . [A] group of twelve to fourteen-year-olds will identify better than six to nine-year-olds, and . . . eleven-year-olds will outperform eight-year-olds — who will, in turn, do better than five-year-olds.[145]

While psychological research raises questions about eyewitness testimony by young children, it does not support the conclusion that such testimony should be automatically rejected. On the contrary, many litigated cases turn on eyewitness testimony by children, and appellate courts correctly affirm judgments that are based solely or partially on such evidence.[146] For example, in *People v. Nance*,[147] the court wrote:

> The defendant was convicted of the rape, sodomy and sexual abuse of a 13-year-old girl. His claim that the victim's eyewitness testimony was insufficient to convict him beyond a reasonable doubt is without merit. It is clear that the testimony was highly reliable. The defendant was identified by both the victim and her mother from a photo array just two days after the incident. Moreover, he was again identified at a *Wade* hearing and then again at a trial by both women. Due to the horrifying circumstances of the attack, it is clear that the victim's attention was clearly focused on the defendant and there was ample time and good light during the attack. Moreover, the descriptions given by the victim and her mother were remarkably consistent and accurate. Under the circumstances, viewing the evidence in the light most favorable to the People, it is clear that the testimony of both eyewitnesses was credible . . . . It is well settled that the accuracy of an eyewitness identification presents an issue of fact for the jury.[148]

When assessing the reliability of a child's eyewitness testimony, a number of factors should be considered.[149] Was the child familiar with the person to be identified? Familiarity may increase the accuracy of testimony.[150] How much

---

144. L. TAYLOR, EYEWITNESS TESTIMONY (1982).

145. *Id.* § 1-3.1, at 14-18.

146. *See, e.g.*, People v. Grady, 133 Misc. 2d 211, 506 N.Y.S.2d 922 (Sup. Ct. 1986).

147. 118 A.D.2d 664, 500 N.Y.S.2d 13 (1986).

148. *Id.* at 665, 500 N.Y.S.2d at 13 (citations omitted).

149. *See generally* Chance & Goldstein, *supra* note 142; Goodman & Reed, *Age Differences in Eyewitness Testimony*, 10 L. & HUM. BEHAV. 317 (1986).

150. *See* Johnson & Foley, *Differentiating Fact from Fantasy: The Reliability*

time did the child have to observe the person or event? How much time elapsed between the event and the child's testimony? The longer the delay, the greater the possibility that a child's memory will fade or be distorted through improper suggestion. Was the person disguised? Was the child so upset by the event that the ability to perceive accurately was impaired?[151] Was the child paying close attention, or was she distracted?[152] Was the lighting adequate? How far away was the child from the event or person to be identified? How old was the child when the event occurred? Preschool children experience more difficulty than older children with the cognitive tasks involved in eyewitness identification. Is the child bright or dull?[153] Did investigating officials employ suggestive identification procedures? These and other factors may affect the accuracy of eyewitness testimony.[154]

In the context of eyewitness testimony by children, it is important to consider the possibility that postevent suggestion, often in the form of leading questions, has distorted a child's memory. A significant number of children are subjected to postevent suggestion which may corrupt their recollection of

---

of Children's Memory, 40 J. SOC. ISSUES 33, 36 (1984) (when it comes to recognition of familiar faces, "there appear to be few age differences in whatever acquisition and remembering processes are responsible" for such recognition).

151. *See* Stewart, *Perception, Memory, and Hearsay: A Criticism of Present Law and the Proposed Federal Rules of Evidence*, 1970 UTAH L. REV. 1, 8-22, 26. In this article, Professor Stewart criticizes the excited utterance exception to the hearsay rule:

> The most unreliable type of evidence admitted under hearsay exceptions is the excited utterance.
>
> . . .
>
> Excitement is not a guarantee against lying, especially since the courts often hold that excitement may endure many minutes and even hours beyond the event. More important, excitement exaggerates, sometimes grossly, distortion in perception and memory especially when the observer is a witness to a non-routine, episodic event such as occurs in automobile collision cases and crimes.

Id. at 28 (citations omitted).

152. *See* People v. Nance, 118 A.D.2d 664, 500 N.Y.S.2d 13 (1986). In this case the court upheld a conviction based on the testimony of a 13-year-old victim. The court stated that "[d]ue to the horrifying circumstances of the attack, it is clear that the victim's attention was clearly focused on the defendant." *Id.* at 665, 500 N.Y.2d at 13.

153. On the effect of intelligence on eyewitness identification, see Chance & Goldstein, *supra* note 142, where the authors write:

> Are age differences in face-recognition performance related to individual differences among children in their rate of cognitive development? Will a relatively bright child perform better than a relatively dull one? Almost no evidence concerning this question is available, although common sense would suggest that information on this point might be invaluable to judges who must decide whether to admit children's testimony in court. . . . Published studies of adults report little or no correlation between intelligence and face recognition.

Id. at 74.

154. *Id.* at 75-76.

events. The psychological literature indicates that such questioning can cause inaccurate eyewitness testimony.[155] Elizabeth Loftus and Graham Davies write that "[i]n a legal situation, witnesses are questioned by relatives, police, and attorneys. What they report may be a blend of information they themselves have experienced and new details provided or constructed in the course of questioning."[156]

Many believe that children are always more suggestible than adults. However, the scientific evidence is clearly to the contrary. Research discloses that by the time children are three or four years old they are quite resistant to suggestion about things that have personal significance to them.[157] Thus, children can and do provide accurate eyewitness testimony.

B. Expert Testimony on Battered Child Syndrome as Evidence of Identity

All courts agree that a properly qualified expert may give an opinion on whether a child's injuries are accidental or nonaccidental. A few courts go further, and permit the expert to opine that the child's injuries were probably caused by an individual "caring" for the child. Such testimony narrows the class of potential perpetrators to a group including the defendant. In *People v. Jackson*[158] the California Court of Appeal wrote:

> [t]he additional finding that the injuries were probably occasioned by someone who is ostensibly caring for the child is simply a conclusion based upon logic and reason. Only someone regularly "caring" for a child has the continuing opportunity to inflict these types of injuries; an isolated contact with a vicious stranger would not result in this pattern of successive injuries stretching through several months.[159]

Most courts reject the rationale of the *Jackson* case, and the majority of decisions hold that an expert may not offer testimony which attributes fault to a particular person or to a class of persons.[160]

---

155. List, *Age and Schematic Differences in the Reliability of Eyewitness Testimony*, 22 DEVELOPMENTAL PSYCHOLOGY 50, 57 (1986) ("One of the most consistent findings in psychological research on eyewitness testimony is the influence of leading question or postevent information on memory."). *See generally* Clifford & Scott, *Individual and Situational Factors in Eyewitness Testimony*, 63 J. APPLIED PSYCHOLOGY 352 (1978); Dodd & Bradshaw, *Leading Questions and Memory: Pragmatic Constraints*, 19 J. VERBAL LEARNING & VERBAL BEHAV. 695 (1980); Loftus & Davies, *Distortions in the Memory of Children*, 40 J. SOC. ISSUES 51 (1984); Loftus, *Leading Questions and the Eyewitness Report*, 7 COGNITIVE PSYCHOLOGY 560 (1975).

156. Loftus & Davies, *Distortions in the Memory of Children*, 40 J. SOC. ISSUES 51, 53 (1984).

157. Goodman & Reed, *Age Differences in Eyewitness Testimony*, 10 L. & HUM. BEHAV. 317 (1986).

158. 18 Cal. App. 3d 504, 95 Cal. Rptr. 919 (1971).

159. *Id.* at 507, 95 Cal. Rptr. at 921.

160. *See, e.g.*, State v. Dumlao, 3 Conn. App. 607, ____, 491 A.2d 404, 410 (1985) ("The expert witness should not be permitted to testify whether 'the battered

C. Uncharged Misconduct Evidence to Establish Identity

Proof of defendant's uncharged misconduct plays an important role in establishing identity. In his treatise on uncharged misconduct evidence, Professor Imwinkelried writes:

> It is well settled that the prosecutor may use the defendant's uncharged misconduct to prove the defendant's identity as the perpetrator of the charged crime. There is an enormous body of decisional law sanctioning this theory of logical relevance. . . . Proof of the defendant's misconduct is more readily admissible to prove the defendant's identity than for other purposes . . . .[161]

Identity may be established through uncharged misconduct which establishes motive, opportunity, plan, preparation, consciousness of guilt or modus operandi.[162]

D. Admissions by Parents

When children are abused, the parents' explanation is often improbable or even impossible. In such cases, physicians rely on the disparity between the medical facts and the proffered explanation to reach a diagnosis of battered child syndrome.[163]

In addition to their utility as a basis for expert testimony, improbable or impossible explanations sometimes constitute admissions. Such admissions evidence consciousness of guilt, and as such, are admissible to identify the parent as the abuser. In *Payne v. State*,[164] for example, the defendant was convicted of abusing an eleven-month-old infant. When the child was examined, the doctor discovered a broken neck. The defendant told the doctor that the child hurt herself falling off a porch step several days earlier. Defendant also told the doctor that the child fell off a couch the night before she was taken to the doctor's office. Apart from the neck injury, bruises were found on the child's

---

child syndrome from which this victim suffered was in fact caused by any particular person or class of persons engaging in any particular activity or class of activities.' "); Commonwealth v. Rogers, 364 Pa. Super. 477, 528 A.2d 610, 614 (1987) ("[T]he expert's testimony on the syndrome is not an opinion regarding the culpability of any particular defendant. Such testimony is not accusatory. . . ."); *see also* State v. Durfee, 322 N.W.2d 778, 783 (Minn. 1982); State v. Wilkerson, 295 N.C. 559, 570, 247 S.E.2d 905, 911 (1978); ("battered child syndrome evidence is not itself probative of who did the battering and without additional evidence, would be inadequate as a matter of law to convict").

161. E. IMWINKELRIED, *supra* note 113, § 3:02, at 3-4 (footnotes omitted); *see also* 22 C. WRIGHT & K. GRAHAM, FEDERAL PRACTICE AND PROCEDURE § 5246, at 511-16 (1978).

162. E. IMWINKELRIED, *supra* note 113, §§ 3:01 to 3:29, at 3-1 to 3-75; 22 C. Wright & K. Graham, *supra* note 161, § 5246, at 511-16; 2 J. WEINSTEIN & M. BERGER, *supra* note 102, § 404[15], at 404-112 to 404-117; Myers, *supra* note 113.

163. For discussion of the diagnostic importance of parents' explanations of injury, see section I. A. of the text.

164. 21 Ark. App. 243, 731 S.W.2d 235 (1987).

head, face, tongue, forearm, chest, abdomen, shoulders, hip, and genitals. The child also had multiple rib fractures. In light of the medical facts, the defendant's explanation was patently untenable. Such a lame excuse cast a shadow of suspicion over the defendant. The Arkansas Court of Appeals concluded that defendant's excuse was admissible against him, writing that "a jury may consider and give weight to any false and improbable statements made by an accused in explaining suspicious circumstances."[165]

E. Behavior That One Would Not Expect of an Innocent Parent

When a seriously injured child is rushed to the hospital, or when paramedics arrive at the home, abusive parents sometimes behave in odd ways which indicate consciousness of guilt. For example, in *People v. Henson*,[166] a severely battered four-year-old was rushed to the hospital, where he was pronounced dead on arrival. When the mother was informed that her child was dead, she said, "Oh God, what will they do to us now."[167] Hardly the cry of anguish one would expect from a concerned parent. In *State v. Johnson*,[168] the prosecutor offered testimony from a fire fighter who responded to a call for emergency medical help. The fire fighter was permitted to testify that " 'the actions of . . . [Defendant] did not seem . . . to be the usual actions or concerns of a parent with a child in that situation.' "[169]

F. Establishing Identity with Evidence that the Defendant Had Exclusive Custody of the Child When Nonaccidental Injury Occurred

When a parent denies that she caused nonaccidental injury, the state may establish identity with evidence that the parent had exclusive custody of the child when the injury occurred.[170] Such evidence often takes the form of a process of elimination in which all potential abusers except the accused are systematically excluded as possible perpetrators.

---

165. *Id.* at 247, 731 S.W.2d at 236; *see* Watson v. State, 290 Ark. 484, 489, 720 S.W.2d 310, 312 (1986). In *Watson*, the defendant was convicted of the capital felony murder of an adult. The court wrote:

> The jury could consider Watson's statements, which at first were denial, then an admission of being there and then a statement that he burned the body to hide the evidence. A jury may consider and give weight to any false, improbable, and contradictory statements made by an accused explaining suspicious circumstances.

Id. See also cases cited *supra* note 29.

166. 33 N.Y.2d 63, 304 N.E.2d 358, 349 N.Y.S.2d 657 (1973).

167. *Id.* at 66, 304 N.E.2d at 359, 349 N.Y.S.2d at 659.

168. 135 Wis. 2d 453, 400 N.W.2d 502 (Ct. App. 1986).

169. *Id.* at 461, 400 N.W.2d at 506.

170. For a good example of the exclusive custody aproach, see People v. Henson, 33 N.Y.2d 63, 304 N.E.2d 358, 349 N.Y.S.2d 657 (1973); *see also* People v. M.V., 742 P.2d 326 (Colo. 1987); State v. McClary, 207 Conn. 233, ——, 541 A.2d 96, 101 (1988).

G. *Res Ipsa Loquitur*

In a number of states, the juvenile court may rely on the doctrine of *res ipsa loquitur* to assume jurisdiction over an abused child.[171] For example, a California statute provides:

> Where the court finds, based on competent professional evidence, that an injury . . . sustained by a minor, of such a nature as would ordinarily not be sustained except as the result of the unreasonable or neglectful acts or omissions of either parent, the guardian, or other person who has the care or custody of the minor, such evidence shall be prima facie evidence that the minor's home is an unfit place for him by reason of the cruelty to him by either of his parents, his guardian, or other person who has the care or custody of said minor, and such proof shall be sufficient to support a finding that the minor is [within the court's jurisdiction.][172]

In effect, such statutes permit the juvenile court to protect a child even though the state cannot establish the identity of the abuser.

H. *Proof of Identity Not Necessary for Juvenile Court Jurisdiction*

In some cases the state can prove that a child suffered nonaccidental injury, but cannot marshall sufficient evidence to identify the abuser. Under some statutory definitions of child abuse, a juvenile court can assume jurisdiction over a child despite lack of evidence identifying the perpetrator.[173]

III. CONCLUSION

Physical abuse of children is pervasive. The American Humane Association reports that "[i]n 1985, an estimated 1,928,000 children were reported for child abuse and neglect to child protective service agencies in the United States and participating jurisdictions. The rate of reporting is estimated at 30.6 children per 1,000 U.S. child population in 1985."[174] American Humane indicates that "the number of official reports of child abuse and neglect has risen 223 percent nationally since 1976."[175] Further, the rate of serious physical abuse appears to be on the rise. *Newsweek* magazine reports:

> The increase in abuse-related deaths is especially disturbing. A survey by the National Committee for Prevention of Child Abuse found a 23 percent increase in such deaths between 1985 and 1986. Those statistics don't tell the

---

171. *See* Michaels, *Evidentiary Issues in Cases Involving Children*, in FOUNDATIONS OF CHILD ADVOCACY 103-04 (D. Bross & L. Michaels eds. 1987).

172. CAL. WELF. & INST. CODE § 355.1 (West 1987).

173. *See In re* Christina T., 184 Cal. App. 3d 630, 229 Cal. Rptr. 247 (1986) (sexual abuse case).

174. AMERICAN HUMAN ASSOCIATION, HIGHLIGHTS OF OFFICIAL CHILD NEGLECT AND ABUSE REPORTING 1985, at 2 (1987).

175. KANTROWITZ, *How to Protect Abused Children*, Newsweek Nov. 23, 1987, at 70.

> whole story. Some deaths listed as accidents and sudden infant death syndrome may actually be related to child abuse. Officially, 1,200 children died of abuse [in 1986]; some experts say, however, that the true figure is probably closer to 5,000. Babies are at the highest risk. Recent surveys by Los Angeles County and the State of Illinois found that 75 percent of the victims in those areas were one year old or younger. Half of the children are beaten to death; the rest die from neglect because their parents fail to supervise them or provide adequate medical care.[176]

The legal system cannot solve the enigma of child abuse, and in some cases legal intervention may do more harm than good.[177] Yet, despite its shortcomings, legal intervention plays an indispensable role in the societal response to maltreatment. There is no question that juvenile court proceedings protect countless children. Furthermore, criminal prosecution is appropriate in many cases. While the legal system cannot guarantee children a safe and nurturing environment in which to live and grow, the law helps stem the tide of abuse.

176. *Id.*

177. *See* Myers, *The Legal Response to Child Abuse: In the Best Interest of Children?*, 24 J. FAM. L. 149 (1985-1986).